

IALA Recommendation V-103

On

Standards for Training and Certification of VTS Personnel

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Document Revisions

Revisions to the IALA Document are to be noted in the table prior to the issue of a revised document.

Date	Page / Section Revised	Requirement for Revision
July 2005	Entire document reformatted	Reformatting to meet IALA documentation standards
September 2009	Entire document	Major revision and updating

IALA Recommendation on Standards for Training and Certification of VTS Personnel (Recommendation V-103)

THE COUNCIL:

NOTING that the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 1995 (STCW Convention) contain regulations concerning training of ships' personnel and the Seafarer's Training, Certification and Watchkeeping Code (STCW Code) contains specifications of minimum standard of competence for ships' personnel;

NOTING ALSO that STCW 95 adopted Resolution 10 concerning training of maritime pilots, vessel traffic personnel and maritime personnel employed on mobile offshore units;

NOTING FURTHER that the International Maritime Organisation in Assembly Resolution A.857(20) on Guidelines for Vessel Traffic Services:

- recommend that VTS Authorities be provided with sufficient staff, appropriately qualified, suitably trained and capable of performing the tasks required, taking into consideration the type and level of services to be provided;
- describe the skill and knowledge qualifications required by VTS Operators to provide vessel traffic services;

RECOGNISING that the 8th International Symposium on VTS (Rotterdam 1996) concluded that VTS Authorities should set standards for VTS Operators, in accordance with international guidelines and other relevant material.

RECOGNISING ALSO that VTS Authorities should provide facilities for training to those standards and institute measures to maintain those standards;

RECOGNISING FURTHER that following a request from the 8th International Symposium on VTS, IALA undertook to develop suitable training and certification standards for VTS personnel;

CONSIDERING the proposals by the IALA VTS Committee;

ADOPTS the revised Standards for Training and Certification of VTS Personnel set out in the annex of this recommendation; and,

RECOMMENDS that National Members and other appropriate authorities, providing or intending to provide Vessel Traffic Services, use the IALA standard of training and the related model courses as the basis for the training and certification of VTS personnel.

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Annex

The Standards for Training and Certification of VTS Personnel

1 INTRODUCTION

1.1 General

International shipping operations need a common approach and universally agreed professional standards and competence for the delivery of Vessel Traffic Services (VTS). The successful delivery of such services depends upon competent and experienced personnel to discharge the responsibilities of a VTS Authority. Recognising that VTS personnel are members of a profession whose principle interaction is with mariners and maritime pilots for the safe management of maritime traffic, their competence needs to reflect that professional responsibility.

The recruitment, selection and training of suitable personnel is a pre-requisite to the provision of professionally qualified personnel capable of contributing to safe and efficient marine operations. Such personnel will help to ensure that full and due regard is given to the diverse tasks inherent in VTS activities.

This recommendation sets out the training requirements and certification standards for VTS personnel. These should be implemented by national members and other appropriate Authorities to ensure that uniform standards of procedures, practices and professional standards are applied by Vessel Traffic Services world-wide.

1.2 Objectives

The objectives of this recommendation are to provide a basis:

- for VTS Authorities when recruiting VTS personnel;
- for model courses to establish a training programme on the specific knowledge and skill requirements necessary for qualification as a VTS Operator;
- to ensure that VTS personnel are trained and qualified to enable them to perform the tasks required;
- for maintaining a satisfactory level of operational performance through the systematic provision of refresher and/or revalidation training for qualified personnel;
- to regularly assess VTS Operators ability to perform to established and recognised standards and;
- for a structured career progression for VTS personnel.

1.3 Definitions and Clarifications

For the purpose of this recommendation, the following definitions and clarifications have been used:

- **Accredited VTS Training** is a course of study comprising VTS training which has been accredited by the Competent Authority or by an organisation approved by the Competent Authority for that specific purpose. Accredited VTS training should comply with IALA standards.
- **Competent Authority** is the authority made responsible, in whole or in part, by the Government for the safety, including environmental safety, and efficiency of vessel traffic and the protection of the environment.
- **Competence** is the ability to perform defined tasks or duties proficiently.
- **On-the-Job Training (OJT)** is training and familiarisation at the VTS centre at which the person will be employed. It includes training on the particular types of service provided by the VTS centre, the facilities and equipment used as well as the local

geography and appropriate port regulations and procedures. OJT should normally be carried out by a designated OJT Instructor.

- **Refresher Training** is training necessary to ensure that VTS personnel maintain a satisfactory level of operational performance. Refresher training may follow an assessment made by the VTS Authority, or may take place as a part of a training programme and continual professional development.
- **Revalidation Training** is training that ensures competence after a break in service. The Competent/VTS Authority may determine the duration of the break in service after which the revalidation training is required.
- **Qualification** is the education, knowledge, skill, experience or any other attribute which the Competent and/or VTS Authority may have determined desirable for performing the duties of the relevant position.
- **Simulator Training** is the simulation of operational events, practices and procedures to instruct trainees and assess their ability to demonstrate their levels of competence.
- **VTS Authority** is the authority with responsibility for the management, operation and co-ordination of the VTS, the interaction with participating vessels and the safe and effective provision of the service.
- **VTS Certification Log** is a record of VTS related certificates and endorsements awarded to VTS personnel during their VTS career. The record may be in the form of a log book or a separate certificate. The log can be in electronic or paper format.
- **VTS Operator (VTSO)** is an appropriately qualified person performing one or more tasks contributing to the services of the VTS.
- **VTS Operator Certificate** is a certificate of competence awarded by a Competent Authority after the candidate VTSO has successfully completed both the V-103/1 training and V-103/3 OJT at the specific VTS centre where the VTSO is employed, as well as meeting any specific requirements of the Competent Authority. The VTS Operator certificate entitles the authorised holder to serve as a VTS Operator and perform the functions which endorsements have been made.
- **VTS Course Certificate** is a document awarded by the training organisation, to indicate that a trainee has achieved successful completion of an accredited IALA Model Course i.e. V-103/1 VTS Operator Training, V-103/2 VTS Supervisor Training, V-103/3 VTS On-the-Job Training and V-103/4 On-the-Job Training Instructor. This course certificate alone should not be an authorisation to operate.
- **VTS Personnel** are persons primarily trained in VTS operations and holding appropriate qualifications issued by, or on behalf of, a Government or a Competent Authority. Two grades of skills, knowledge and competence of VTS personnel are set out in this recommendation namely, VTS Operator and VTS Supervisor respectively (Annex 1 and 2 provide a broad guide regarding job descriptions of these two grades). VTS Personnel may also include VTS Managers, who should ideally hold qualifications appropriate to the duties performed.

1.4 Abbreviations

IMO	International Maritime Organisation
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IAPH	International Association of Ports and Harbours
IMPA	International Maritime Pilots Association
OJT	On-the-Job Training
OJTI	On-the-Job Training Instructor
VTS	Vessel Traffic Services
VTSO	Vessel Traffic Service Operator

1.5 References

- [1] IALA VTS Manual
- [2] IALA/IAPH/IMPA World VTS Guide
- [3] IALA Model Courses V-103/1, V-103/2, V-103/3 and V-103/4
- [4] IALA Guideline 1014 on the Accreditation of VTS Training Courses
- [5] IALA Guideline 1017 on the Assessment of Training Requirements for Existing VTS Personnel, Candidate VTS Operators and Revalidation of VTS Operators Certificates
- [6] IALA Guideline 1027 on Designing and Implementing Simulation in VTS Training at Training Institutes and VTS Centres
- [7] IALA Guideline 1045 on Staffing Levels at VTS Centres

2 GENERAL PROVISIONS

2.1 Responsibilities

The following excerpts from IMO Resolution A.857(20) Guidelines for Vessel Traffic Services are relevant to training:

In planning and establishing a VTS, the Government or the Competent Authority should:

- determine the services and level to which the services are to be provided by the VTS, having regard to the objectives of the VTS;
- ensure that the VTS Authority is provided with sufficient staff, appropriately qualified, suitably trained and capable of performing the tasks required, taking into consideration the type and level of services to be provided;
- establish appropriate qualifications and training requirements for VTS operators, taking into consideration the type and level of services to be provided; and
- ensure that provisions for the training of VTS operators are available.

In operating a VTS the VTS Authority should:

- ensure that the standards set by the Competent Authority for types of service and operator qualifications and equipment are met; and
- ensure that the VTS operations are harmonised with, where appropriate, ship reporting and routing measures, aids to navigation, pilotage and port operations.

2.2 Principles

VTS personnel should be capable of interacting with vessel traffic in a VTS area. In order to carry out the duties required by a VTS Authority, VTS personnel should be appropriately trained and qualified to IALA Recommendation V-103, using the model courses as developed by IALA.

In order to ensure that IALA standards for VTS training meet the appropriate level, the VTS training courses should be accredited by the Competent Authority. This should help to ensure the competence of personnel that occupy operational positions in a VTS Centre.

A person should therefore only be considered capable of carrying out the duties of a VTS Operator when in possession of the appropriate V-103/1 certificates and endorsements.

2.3 IALA Model Courses

The basis of VTS training is set out in the following IALA model courses:

- 1 V-103/1 VTS Operator Training
- 2 V-103/2 VTS Supervisor Training
- 3 V-103/3 VTS On-the-Job Training
- 4 V-103/4 VTS On-the-Job Training Instructor

These courses are not intended to be used directly as course material but are a guide that can be adapted in two ways, to:

- meet the entry level knowledge of candidates; and
- enable course design to be matched to the requirements of the appropriate Competent/VTS Authority.

The model courses are designed to produce universally common standards of training and performance.

2.4 Accreditation of VTS Training

The purpose of accreditation is to provide a basis to ensure that the VTS courses meet the requirements of this recommendation and the related model courses. It is also important that the model courses should be delivered under the framework of a Training Management System (TMS) within an approved quality system.

A training organisation intending to provide VTS training should apply for accreditation to the Competent Authority of the country, in which it is located. The Competent Authority should carry out an audit in order to ensure that the IALA standards as well as any other requirements are met by the training organisation. On request, the IALA secretariat, or any other appropriate organisation, may assist the Competent Authority to fulfil part of, or the whole accreditation process.

The process for accreditation is presented in IALA Guideline 1014 Accreditation of VTS Training Courses and includes:

- application to the Competent Authority;
- completion of audit(s);
- verification / renewal of accreditation.

2.5 Recognition of Certificates

Where suitable reciprocal arrangements apply, the Competent Authority of one country or state should recognise a VTS Operator course certificate of another country or state provided that the:

- certificate has been issued in accordance with this recommendation; and
- Competent Authority is satisfied with the training arrangements of the other country or state concerned.

3 VTS PERSONNEL

3.1 VTS Operators and Supervisors

VTS Operator and Supervisor training should be carried out by a training organisation, which provides accredited VTS training. The training should be conducted in accordance with the appropriate IALA model courses V-103/1 *VTS Operator Training*, V-103/2 *VTS Supervisor Training* and V-103/3 *On-the-Job Training*. These internationally agreed qualifications for VTS personnel are the key to the establishment of common training standards.

Maritime related qualifications may be taken into consideration when assessing the training requirements for prospective VTS Operators or Supervisors.

A sense of responsibility, watchfulness and preciseness characterise a competent VTS Operator. Training and education should therefore aim at stimulating these qualities.

In addition to the duties carried out by VTS Operators, VTS Supervisors supervise the activities undertaken within a VTS centre and ensure that the standards set by the authority are maintained.

3.1.1 Operational Job Descriptions

VTS Authorities should develop detailed job descriptions for their operational personnel at each VTS centre, based on the types of service to be provided, the equipment available and the coordination needed with other organisations and departments.

Examples of job descriptions for VTS Operators and VTS Supervisors are provided in APPENDIX 1 and APPENDIX 2 respectively.

3.2 VTS Manager

The VTS Authority may establish the post of a VTS Manager. The VTS Manager is responsible for managing and co-ordinating the activities of the VTS centre on behalf of the VTS Authority. In some cases, a VTS Manager may have the responsibility for more than one VTS centre.

The VTS Manager should have knowledge of the principles and practices of the particular VTS, the types of service provided and the overall structure and capabilities of the VTS organisation. This VTS knowledge may be gained through experience as a VTS Operator or VTS Supervisor. Such experience would be particularly relevant where the role includes responsibilities for VTS contingency planning. The manager should also possess managerial qualifications required by the Competent or VTS Authority concerned.

An example of the format for a VTS Manager's job description is provided in APPENDIX 3.

3.3 VTS Career Progression

The formal recognition of VTS qualifications provides the foundation for a properly balanced and self-evident career structure and the drive to set and make every effort for improved standards of performance.

The establishment of internationally recognised VTS qualifications provides a professional framework similar to that adopted by the shipping and pilotage industry. The regular validation of those qualifications seeks to create improvement and quality standards comparable to those of other professions. These attributes enable successful personnel to offer their services for employment on a worldwide basis.

Additionally, the scope for career progression, either in VTS or in a wider diversity of associated marine activities offers a career structure which provides for motivation and ambition, whilst making continued use of the skills and experience gained (see example in Figure 1).

3.4 Instructors

VTS personnel who demonstrate aptitude for training should be encouraged to obtain experience in instructional techniques, knowledge of training programmes and an understanding of specific training objectives. This should enable them to become instructors for the VTS training courses or On-the-Job Training. In order to maintain a high level of training effectiveness, instructors should ideally have an appropriate balance of professional VTS knowledge as well as educational qualifications.

Instructors should keep up to date with new techniques and national and international rules and regulations. Instructors should be encouraged to include relevant new developments and techniques in the training.

Competent Authorities should ensure that instructors are appropriately qualified and experienced for the particular types and levels of training and corresponding assessment of competence.

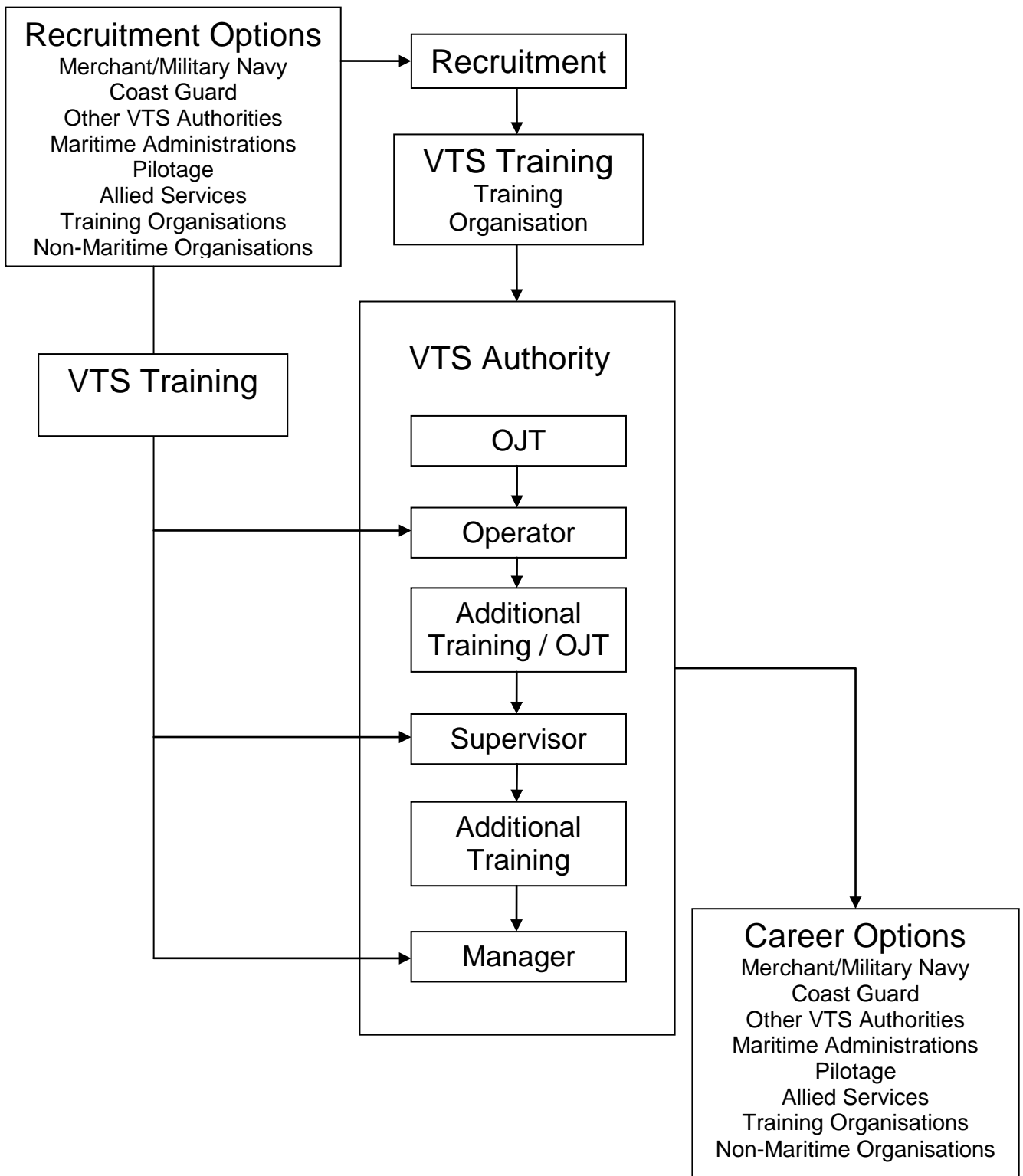


Figure 1 Career Progression

4 SELECTION AND RECRUITMENT

4.1 Entry Requirements

Successful recruitment of VTS Operators is important in order to maintain the quality and capacity of Vessel Traffic Services. To ensure the quality of the trainees it is crucial to use appropriate entry requirements and follow a thorough selection process.

The VTS Authority should set the minimum entry requirements for applicants. These requirements should reflect those of the Competent Authority to act as a VTS Operator.

When setting the entry requirements the following points should be considered;

- prior skills and knowledge;
- previous maritime experience and education;
- personal suitability characteristics; and
- medical fitness requirements.

If applicable, the Competent Authority may consider setting requirements for the VTS Authority to:

- verify that the applicant meets the entry requirements;
- assess the applicants personal aptitude and suitability; and
- establish a selection process in order to choose the most qualified applicant.

The applicants should be able to demonstrate a good working language in the use of the English language as required by the VTS Authority. They should also be fluent in the use of their own native language where their language is primarily used for communications (for example in inland waterways).

4.2 Selection Process

The selection process should include aptitude testing, assessment of prior learning, medical/physical requirements and an assessment of the personal attributes of the candidate.

The purpose of the selection process is to provide a mechanism to facilitate selection of applicants for trainee operators. An important part of this is to test and assess the suitability of the applicants to perform the required VTS tasks. The selection process should be established and performed by the VTS Authority in accordance with the requirements set by the Competent Authority.

Personnel may be recruited directly as VTS Supervisors if they can demonstrate to the VTS Authority that they have the required experience to undertake the responsibilities and duties of a VTS Supervisor. The VTS Authority should ensure that such personnel have received VTS Operator training and any additional training as may be necessary to meet the required standards of competence for a VTS Supervisor.

4.2.1 Aptitude Assessment

Aptitude assessments should be carried out as part of the selection process. All prospective candidates should be assessed, even if they have previous maritime experience. Assessments that use simulated traffic movements are recommended.

Assessments should be designed to determine the ability of candidates to:

- discriminate between relevant and non-relevant information;
- combine auditory and visual information;
- demonstrate spatial and situational awareness;
- demonstrate alertness and decisiveness in all situations;
- carry out several tasks simultaneously;
- carry out routine work without losing situational awareness;

- show initiative while working within a framework of standards, regulations and structured procedures;
- recognise and manage work related and personal stress; and
- demonstrate appropriate communication and literacy skills.

Tests which employ simulation of traffic movements are recommended for this assessment.

An example of how aptitude testing might be arranged is given in APPENDIX 4.

4.3 Assessment of Prior Learning (APL)

Depending on the recruitment level and background of candidates, some elements of the model course could be addressed through an Assessment of Prior Learning (APL) and experience, reflecting both the formal training and experience of the candidate. Any such module exemption should be approved by the respective Competent Authorities.

A variety of assessment methods are available for use by a Competent Authority, VTS Authority or training organisation to provide an accurate measure of the prior learning of the candidate. It is probable that a combination of methods may need to be used to ensure that all aspects of prior learning are taken into account.

When the assessment of prior learning indicates that the candidate has the competence required for a particular subject, no training on the subject need be given. However, when the assessment indicates that the required competence level is not being met appropriate training should be given to ensure that the competence level is met.

4.4 Medical/Physical Requirements

Candidates should meet the medical, including optical, standards of health established by the Competent Authority.

4.5 Personal Attributes

Personal attributes are important factors in the selection criteria. A continual assessment should be made of the candidates' suitability throughout the selection process. Candidates should at a minimum have an appropriate sense of responsibility, ability to adopt and follow procedures, as well as having a willingness to co-operate with others as part of a team.

5 QUALIFICATION AND CERTIFICATION

5.1 Qualifications

VTS Operator qualifications should be based on the principle that satisfactory results are obtained during both the VTS Operator Training Course (V-103/1) and On-the-Job Training Course (V-103/3).

The following steps are recommended for attaining qualification:

- 1 The candidate VTSO has been selected and the set requirements as regard to prerequisites and medical/physical requirements are fulfilled.
- 2 On successful completion of an accredited course of training the VTSO trainee should receive a course certificate.
- 3 The course certificate should then be submitted to the appropriate authority who verifies the validity of the certificate prior to issuing a VTS certification log book.
- 4 The VTSO trainee will then carry out OJT at a specific VTS centre, under the supervision of an OJT Instructor.
- 5 On successful completion of OJT the appropriate authority should issue a VTS Operator certificate enabling the trainee to operate as a qualified VTSO.

6 Any additional successful completion of accredited courses of VTS training, such as Supervisor and/or refresher training, should also be entered into the VTS certification log book.

5.1.1 Validity

A VTS qualification should be valid until either:

- an assessment indicates that the holder has fallen below the standards, including medical requirements, set by the Competent Authority for operator qualifications; or
- there is a break in carrying out the duties, for whatever reason, for a period defined by the Competent Authority.

5.2 Certification

5.2.1 VTS Course Certificate

A VTS course certificate should be awarded by the training organisation, which provides the accredited VTS training, to trainees on successful completion of their VTSO training. The course certificate should include the:

- candidate's full name;
- country in which it was awarded;
- signature of the issuing authority and the training organisation;
- relevant course;
- date of award; and,
- serial number of the course certificate.

The course certificate should be in a format similar to the example given in APPENDIX 5.

5.2.2 VTS Certification Log

A VTS certification log should be issued by the appropriate authority after validation of the course certificate. The log should include:

- the name of the trainee ;
- brief details of the VTS Operator course certificate, including its number;

The log should be used to record:

- the type of service (i.e. Information Service, Navigational Assistance Service or Traffic Organisation Service) which the holder is authorised to provide;
- regular assessment records and the result thereof;
- any break in service defined by the Competent/VTS Authority;
- On-the-Job Training at each VTS at which the holder is employed as a VTS Operator or Supervisor including the name of each VTS centre at which On-the-Job Training has been completed, the name and signature of the OJT Instructor and the date the training was completed;
- revalidation records including the name of the organisation at which the certificate was revalidated, the signature of the person responsible for the revalidation and the date of revalidation;
- additional VTS training courses (Supervisor, On-the-Job Training Instructor) successfully completed including the name of the organisation where the additional VTS training courses was undertaken, the signature of the person responsible for the training and the date the training was completed; and
- any relevant course, or training, successfully completed including the name of the organisation at which Supervisor training has been completed, the name and signature of the person responsible for the training and the date of completion.

VTS course Certificates and certification logs should be in the official language or languages of the awarding country. If the language used is not English, the text should include a translation into that language.

5.3 Maintaining Certification

In order to maintain certification of VTS operational personnel, the VTS Authority should ensure that all operational personnel, under their jurisdiction, undergo an assessment at regular intervals. This could be in the form of a continual assessment at the VTS centre or at a training organisation.

If VTS operational personnel fail an assessment or have had a break in service, for whatever reason and for a period as determined by the Competent/VTS Authority, the operator concerned may be required to undergo refresher training, or certificate revalidation as deemed appropriate by the Competent Authority.

5.3.1 Regular Assessment

An assessment of the performance of each VTS Operator should be carried out by a VTS Supervisor/Manager at regular intervals, preferably annually, to ensure that the standards set by the Competent Authority for operator qualifications are continuing to be met.

In the absence of a VTS Supervisor, the assessment should be carried out by a person designated by the Competent/VTS Authority.

5.3.2 Refresher Training

Refresher (or updating training) may be required by the Competent and/or VTS Authority in order to ensure that the level of competence, appropriate to the service type(s) provided is maintained. This may be deemed necessary when, for example, there has been a break in service, new equipment has been installed or new operating procedures have been introduced.

Refresher training may follow an assessment and/or may be given periodically according to the requirements of the Competent and/or VTS Authority or when deemed necessary by the VTS Authority.

Refresher training may be carried out by the VTS Authority or by means of a formalised course, approved by the Competent Authority.

5.3.3 Revalidation

Revalidation is required if either of the conditions described in section 5.1.1 (Validity) occur. The revalidation should ensure the holder of a VTS Operator qualification continues to maintain professional competence by one of the following methods:

- An evaluation by an On-the-Job Training Instructor; or,
- Successful completion of refresher training; or,
- A revalidation assessment carried out by the VTS Authority.

5.4 Qualifications of Instructors and Assessors

Competent Authorities should ensure that instructors and assessors are appropriately qualified and experienced for the particular training and assessment of competence for which they are given responsibility. Such qualifications and experience should be incorporated in the quality standards. Appropriate training in teaching techniques, training and assessment methods and possibly practices should be offered the instructors and assessors at a regular basis.

5.4.1 Instructors

Any person conducting VTS training should:

- have an appreciation of the training programme and an understanding of the specific training objectives for the particular type of training being conducted;
- be professionally and academically qualified in the task for which training is being conducted;

- have an appropriate balance of professional and teaching qualifications;
- if conducting training with the use of a simulator:
 - have received appropriate guidance in instructional techniques involving the use of simulators; and
 - have gained practical and operational experience on the particular simulator being used.

5.4.2 Assessors

Any person conducting assessment of competence of VTS personnel during training should:

- have an appropriate level of knowledge and understanding of the competence to be assessed;
- be qualified in the task for which the assessment is being made;
- have received appropriate guidance in assessment methods and practices;
- have gained practical assessment experience; and
- if conducting assessment involving the use of simulators, have gained practical instruction on the particular type of simulator under the supervision, to the satisfaction of an experienced assessor.

6 TRAINING

6.1 Introduction

The type of training depends largely on the knowledge base of the trainee concerned.

To deliver a training course effectively, consideration should be given to the availability and the use of:

- Qualified instructors;
- Support staff;
- Classrooms and other spaces;
- Equipment, including simulators;
- Textbooks, technical papers; and
- Other reference material.

Thorough preparation is the key to successful implementation of a training course.

All stages of VTS training should include continuous assessment. A task book (training log) should be used to show progress being made by VTS personnel in their particular training. The log would show the number of hours allocated and/or time in which each task was completed. Training times should be dependent on the experience of trainees. Training to work as a member of a team should normally be part of the syllabus.

All training and assessment of VTS personnel should be:

- structured in accordance with written programmes, including such methods and media of delivery, procedures, and course material as are necessary to achieve the prescribed standard of competence; and
- conducted, monitored, evaluated and supported by persons qualified in accordance with section 5.4 Qualifications of Instructors and Assessors.

All training courses should be based on the model courses associated with this recommendation. They should also be accredited by the Competent Authority concerned. VTSO training should be carried out at a training organisation, which provides accredited VTS training.

Competent Authorities should ensure that the aims and objectives of training are defined within an overall training programme. Specific training objectives and tasks should be selected so as to relate as closely as possible to VTS tasks and practices.

6.2 Model Courses

The model courses associated with this recommendation are composed of modules. This approach facilitates courses to be developed and:

- reflects the training received, while maintaining common international standards; and
- takes into account the previous training and experience of prospective VTS personnel.

6.2.1 VTS Operator Training Model Course V-103/1

The award of a VTS Operator certificate and endorsement to act as a VTS Operator should be achieved by successfully undertaking the following modules:

- 1 Language.
- 2 Traffic management.
- 3 Equipment.
- 4 Nautical knowledge.
- 5 Communication co-ordination.
- 6 VHF radio.
- 7 Personal attributes.
- 8 Emergency situations.

6.2.2 VTS Supervisor Training Model Course V-103/2

The award of an endorsement in the VTS certification log as a VTS Supervisor should be obtained by a VTS Operator successfully undertaking the following modules:

- 1 Advanced Traffic Management.
- 2 VTS equipment.
- 3 Additional personal attributes.
- 4 Responding to emergency situations.
- 5 Administrative functions.
- 6 Legal knowledge.

Following successful completion of V-103/2 the endorsement should be documented and recorded in the VTS Certification Log.

6.2.3 On-the-Job Training (OJT) Model Course V-103/3

Every certificated VTS Operator should receive On-the-Job Training from a qualified On-the-Job Training Instructor before being authorised to carry out the duties of a VTS Operator.

On-the-Job Training should follow an approved programme of training with specific learning objectives, which:

- provides knowledge of the local or regional nautical topography, hydrographic and meteorological characteristics and legislation and regulations relating to the responsibilities and activities of the VTS centre;
- provides detailed knowledge of the services provided by the VTS centre and ensures that during the required period of training the VTS Operator receives systematic practical training and experience in the tasks, duties and responsibilities of a VTS Operator at the VTS centre concerned;
- is closely supervised and monitored by a qualified On-the-Job Training Instructor at the VTS centre; and
- is adequately documented and recorded in the VTS certification log.

The Competent/VTS Authority should define the duration of the On-the-Job Training period and the detailed training syllabus, taking into account the requirements of the particular VTS centre.

6.2.4 On-the-Job Training Instructor Model Course V-103/4

The award of an endorsement in the VTS certification log as On-the-Job Training Instructor should be obtained by successfully undertaking the following modules:

- 1 Development of a VTS centre specific training programme;
- 2 Preparation of a trainee specific programme;
- 3 Delivery of OJT;
- 4 Evaluation/assessment/examination of trainees; and
- 5 Completion of OJT leading to authorisation to operate.

Following successful completion of V-103/4 the endorsement should be documented and recorded in the VTS certification log.

APPENDIX 1 VTS OPERATOR JOB DESCRIPTION

1 INTRODUCTION

The job description set out in this annex is intended to provide a broad guide to the tasks expected to be undertaken by a VTS Operator. VTS Authorities should develop detailed job descriptions for VTS Operators at each VTS centre, based on the services to be provided by the particular centre, the equipment available and the coordination which takes place with allied services.

2 JOB PURPOSE

The purpose of the position of a VTS Operator is to deliver Vessel Traffic Services (VTS) in order to ensure the safe and efficient movement of vessels within the area of jurisdiction.

3 ACTIVITIES AND TASKS

- 1 Interact with ships to deliver the VTS services defined by the Competent/VTS Authority.
- 2 Operate equipment for communications, data collection, data analysis and establishment of a traffic image.
- 3 In an Information Service (INS) transmit information at appropriate times, at the request of a vessel or when deemed necessary by the VTS, for example a sudden deterioration of weather conditions.
- 4 In a Navigational Assistance Service (NAS) transmit such information as may be needed to aid a ship in difficult navigational or meteorological circumstances or in case of defects or deficiencies. The assistance to be given on request by a ship or when deemed necessary by the VTS.
- 5 In a Traffic Organisation Service (TOS), organise the vessel traffic within a waterway by means of waterway information, traffic monitoring and traffic regulations using, as necessary, nautical knowledge of the area concerned, the traffic image and a suitable marine information management system.
- 6 Respond to emergency situations such as distress, marine pollution and other special circumstances defined for the VTS area.
- 7 Where arranged, co-ordinate communications with ships, allied services and other agencies.

4 KNOWLEDGE, SKILLS AND EXPERIENCE

VTS personnel undertaking these activities and tasks should hold a current VTS Operator certificate and an endorsement in the VTS certification log for On-the-Job Training at the VTS centre at which the operator is employed.

APPENDIX 2 VTS SUPERVISOR JOB DESCRIPTION

1 INTRODUCTION

The job description set out in this annex is intended to provide a broad guide to the tasks expected to be undertaken by a VTS Supervisor. VTS Authorities should develop detailed job descriptions for VTS Supervisor at each VTS centre where they are employed. The detailed job descriptions should be based on the services to be provided by the particular centre, the equipment available and the coordination which takes place with allied services.

2 JOB PURPOSE

The purpose of the position of a VTS Supervisor is to:

- supervise the activities undertaken at the VTS with regard to the types of service provided;
- supervise a team, that has the responsibility for conducting a Vessel Traffic Service, to the satisfaction of the Competent/VTS Authority as well as vessels and other users;
- ensure that the standards set by the Competent Authority for operator qualifications continue to be met; and
- ensure that co-ordination takes place between the VTS, allied services and other port facilities and services.

3 ACTIVITIES AND TASKS

In addition to the activities and tasks appropriate to a VTS Operator, the VTS Supervisor should:

- 1 Ensure that the service provided meets the requirements of both the users and the VTS Authority.
- 2 Coordinate the interface between the VTS, allied services and other port facilities and services.
- 3 Supervise VTS Operators.
- 4 Ensure the efficient running of the VTS operations room.
- 5 Carry out assessments of VTS Operators.
- 6 In conjunction with On-the-Job Training Instructors, carry out revalidation assessments on VTS Operators.

4 KNOWLEDGE, SKILLS AND EXPERIENCE

VTS personnel undertaking these activities and tasks should hold a current VTS Operator certificate and the appropriate endorsements in the VTS certification log for VTS Supervisor and for On-the-Job Training at the VTS centre at which the Supervisor is employed.

Unless recruited directly, VTS Supervisors should preferably have appropriate experience as a VTS Operator as required by the Competent/VTS Authority.

APPENDIX 3 VTS MANAGER JOB DESCRIPTION

1 INTRODUCTION

The job description for the VTS Manager may include some, or all, of the purposes, activities and tasks set out below. VTS Authorities should ensure that managers of VTS centres receive adequate training in all aspects of VTS appropriate to their responsibilities and introduce arrangements which ensure that the necessary level of competence in VTS is maintained.

2 JOB PURPOSE

The purpose of the position of a VTS Manager is to

- lead and manage the operation and delivery of Vessel Traffic Service (VTS);
- ensure that the VTS has adequate resources to undertake properly the responsibilities defined by the VTS Authority.

3 ACTIVITIES AND TASKS

The job description for the VTS Manager may include the following responsibilities:

- 1 Ensuring that the aims and objectives of the VTS are met at all times.
- 2 Ensuring that all VTS operations follow current rules, regulations and legislation.
- 3 Managing and co-ordinating financial, technical and human resources.
- 4 Ensuring that the standards set by the Competent/VTS Authority for operator qualifications and training are met.
- 5 Ensuring that the training and certification of VTS personnel are appropriate to the service types being provided.
- 6 Ensuring VTS quality standards are maintained.
- 7 Maintaining awareness of continuing development for the VTS centre(s).
- 8 Planning and developing of emergency procedures as appropriate to the VTS area of responsibility.
- 9 Ensuring that all adopted standard operating procedures are reviewed and amended as required.
- 10 Developing and maintaining a good public information and relations programme.
- 11 Ensuring compliance with evidentiary provisions in the event of an incident or accident occurring in the VTS area. The Manager should also ensure that all such events are properly recorded and readily available for examination by the Competent/VTS Authority.

4 KNOWLEDGE, SKILLS AND EXPERIENCE

The VTS Manager should be able to:

- demonstrate knowledge on the delivery of Vessel Traffic Services;
- demonstrate a high level ability to effectively lead and manage VTS operations;
- initiate, lead and implement change and continuous improvements; and
- demonstrate leadership skills and management experience.

Ideally, the VTS Manager should possess a VTS Operator/Supervisor qualification.

APPENDIX 4 APTITUDE TESTING

The Competent Authority should consider appropriate personal aptitude and suitability requirements for each applicant. To assess the applicant's aptitude and suitability, different types of tests and evaluations may be used. This could include, but not be limited to;

- Interviews;
- written tests;
- practical tests; and
- psychometric tests.

A test of the applicant regarding aptitude and suitability may include, but not be limited to, the following abilities:

- situational awareness;
- spatial conceptual ability:
 - assessment of the relative movement to fixed and moving objects.
- communications skills (written and oral):
 - effective participation as a member of a team;
 - vocabulary and verbal expression capacity.
- numerical aptitude;
- simultaneous tasking capability [multi-tasking] :
 - ability to receive multiple inputs;
 - ability to prioritise and decide what situations require immediate action.
- judgement and responsibility;
- ability to take initiatives and make decisions;
- ability to function under conditions of stress;
- ability to work and co-operate with others as part of a team.

